## **ABSTRACT**

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A transvenous implantable medical device adapted for implantation in a body, and which is particularly adapted for use in a vessel such as the coronary sinus or cardiac great vein. The implantable medical device may take the form of a lead or catheter, and includes an extendable distal fixation member such as a helix. In one embodiment, the fixation member is a helix constructed of a shape memory metal or other super-elastic material. Upon deployment, the helix assumes a predetermined helix shape larger than the diameter of the lead body diameter. The helix functions to wedge or fix the lead within the vessel in a manner that does not impede the flow of blood through the vessel. The helix may be retracted for ease of repositioning and/or removal. In one embodiment of the invention, the fixation member may be advanced using a stiffening member such as a stylet. In another embodiment, the helix is coupled to a coiled conductor such that rotation of the conductor extends or retracts the helix. According to yet another aspect of the invention, a helix lumen including a flexible fluid-tight seal may be utilized to house the helix when it is in the retracted position.